

# Public Meeting to Discuss No Discharge Zone (NDZ) Draft Application

Farnham Creek and Lancaster Creek in Richmond  
County  
October 5, 2010



# Agenda

*Introduction to No Discharge Zones (NDZs)* - Margaret Smigo  
Piedmont Regional TMDL  
Coordinator

*Overview of NDZ application prepared by  
Northern Neck Planning District Commission (NNPDC)  
for Farnham and Lancaster Creeks in Richmond Co* – Stuart McKenzie  
NN PDC Environmental  
Planner

*Question and Answer Session - Group*



# *Clean Water Act (1972)*

- The Clean Water Act (CWA) prohibits the discharge of untreated waste into United States territorial waters
- Section 312 of the CWA mandates that all commercial and recreational vessels *with an installed toilet* be equipped with a United States Coast Guard (USCG) certified *Marine Sanitation Device (MSD)*

# *Marine Sanitation Device (MSD)*

CWA (Sec 312)....

*“includes any equipment for installation on board a vessel which is designed to receive, retain, treat, or discharge sewage, and any process to treat such sewage”*

# *Marine Sanitation Devices*

- **Type I MSD** must produce an effluent having a fecal coliform bacteria count  $\leq 1,000$  per 100 milliliters and no visible floating solids.
- **Type II MSD** must produce an effluent having a fecal coliform bacteria count  $\leq 200$  per 100 milliliters and suspended solids  $\leq 150$  milligrams per liter
  - *Required on boats > 65 ft*
- **Type III MSD** is a holding tank (with or without discharge capability)



# *A No Discharge Zone...*

Is a federally designated body of water where discharge of *treated* vessel waste is prohibited (MSD I/II)



# *Why is Treated Overboard Discharge (MSD I/II) an Issue?*

- MSDs (I/II) may not be capable of destroying enough bacteria in waterways with bacteria impairments
- MSDs (I/II) may not be capable of destroying all pathogens in human waste (i.e. viruses – Hepatitis A, Norovirus)
- MSD (I/II) chemicals may be harmful to the environment
- Nutrients only minimally or partially removed by MSDs (I/II) (Nitrogen/Phosphorus)
  - Nutrients contribute to algae blooms which can lead to depletion of dissolved oxygen in water and ultimately, fish kills
  - Low or no dissolved oxygen affects aquatic organisms such as fish and crustaceans
  - Contributes to impairments of submerged aquatic vegetation (SAV)
  - Chesapeake Bay TMDL calls for nitrogen/phosphorus reductions

# *Federal NDZ Guidance*

United States  
Environmental  
Protection Agency

Office of Water  
Washington, DC 20460

EPA 842-B-94-004  
August 1994



## **Protecting Coastal Waters from Vessel and Marina Discharges:**

**A Guide for State and Local Officials**

**Volume I. Establishing No Discharge Areas under §312  
of the Clean Water Act**

For Full Document Visit

<http://www.epa.gov/reg3wapd/nodischarge/index.htm>





# *Federal NDZ Guidance*

## **Water Criteria for Designation**

- Certain fresh waters
- Waters where the presence of adequate alternatives (i.e. sewage pump-outs) can be established
- Waters of particular environmental significance, regardless of pump-out availability (i.e. sensitive species)
- Areas surrounding drinking water intakes regardless of pump-out availability

# *Federal NDZ Guidance*

## Key elements of an application for NDZ designation:

- (1) A certification that the protection and enhancement of the waters described in the petition require greater environmental protection than the applicable Federal standard;*
- (2) A map showing the location of commercial and recreational pump-out facilities;*
- (3) A description of the location of pump-out facilities within waters designated for no discharge;*
- (4) The general schedule of operating hours of the pump-out facilities;*
- (5) The draught requirements on vessels that may be excluded because of insufficient water depth adjacent to the facility;*
- (6) Information indicating that treatment of wastes from such pump-out facilities is in conformance with Federal law; and*
- (7) Information on vessel population and vessel usage of the subject waters (EPA Guidance 842-B-94-004)*

# *Federal Requirements of MSDs in a NDZ*

- In a no-discharge zone:
  - *Type III devices must be secured by*
    - *Closing overboard discharge valve and removing handle*
    - *Securing with a padlock or with non-removable wire tie*
  - *Type I and II devices must be secured by*
    - *Closing the seacock and padlocking it*
    - *Using a non-releasable wire tie*
    - *Removing the seacock handle (with the seacock closed)*
    - *Lock door leading to toilet*



# Virginia Regulatory Background

## VADEQ Guidance Memo No. 08-2003 (2/26/2008)

Visit <http://www.deq.virginia.gov/waterguidance/pdf/082003.pdf>

### The Virginia NDZ process:

- Application process can be initiated by
  - Stakeholder petition (*“external”*)
  - Component of TMDL IP (*“internal”*)
- DEQ determines necessity, level of support, pump-out availability, prepare draft application in collaboration with stakeholders
- Public meeting and comment period
- Submit to EPA
- Present approved designation to SWCB

# Virginia Regulatory Background

## House Bill 1774 (2009 Session, Gen Assembly)

*“The tidal creeks of the Commonwealth are hereby established as no discharge zones for the discharge of sewage and other wastes from documented and undocumented boats and vessels.”*

- Mandates VA DEQ to implement federal law (i.e. apply to EPA)
- Restates federal NDZ law; *plus...*
  - Mandates that houseboats have holding tank & use pump-outs
  - Extends enforcement authority to **all** law enforcement agencies
  - Requires marinas in NDZs to give notice to patrons via:
    - Signage
    - Language in slip rental contracts

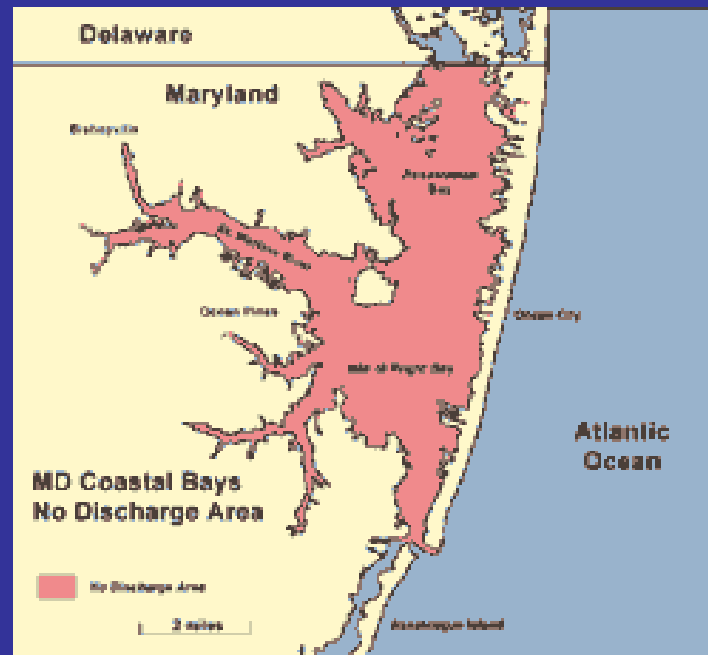
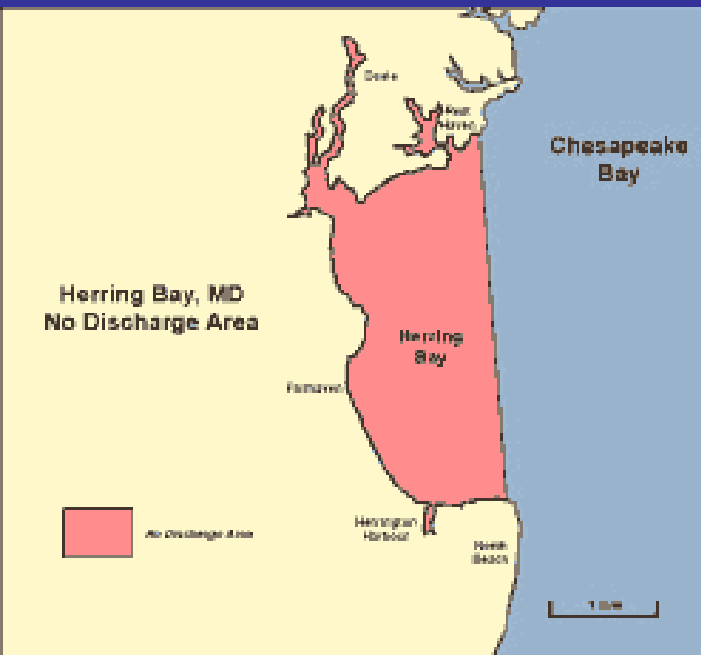


# NDZs in Maryland...



Maryland recently withdrew its application for a NDZ to cover their entire portion of the Chesapeake Bay

2002





# *Extent of VA Bacteria Impairments*



*Most tidal tributaries have a shellfish or recreation use impairment due to less volume and less flushing compared to the major rivers*

\*As of 2008 VADEQ Integrated Assessment Report

# *NDZs in Virginia*

## Approved VA NDZs

- Smith Mountain Lake, Bedford, Franklin, & Pittsylvania Counties (2000)
- Lynnhaven River, Virginia Beach (2007)
- Broad and Jackson Creeks, Fishing Bay, Middlesex County (2009)

## Application in revision

- Owl Creek / Rudee Inlet, Virginia Beach

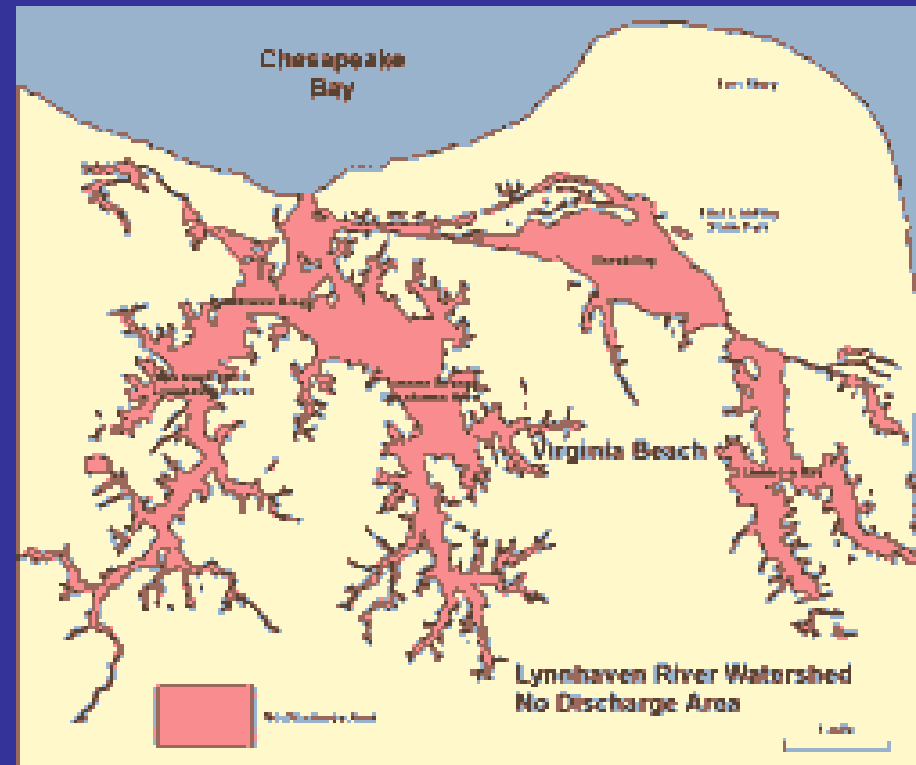
## Applications in preparation

- Northern Neck counties – Farnham Creek to Rosier Creek from Richmond to Westmoreland Counties
  - Applications to be submitted for Creeks per County

Other nearby counties have requested information ☺

# Virginia NDZ Experience - Lynnhaven

- Huge stakeholder involvement throughout TMDL/IP process
  - *Lynnhaven River Now* (non-profit group)
- Positive impact of NDZ outreach:
  - Shellfish growing areas closed since 1930's now re-opened
  - Cavalier Golf & Yacht Club reported more pump-outs
    - FY 2006 - 154 pump outs (pre NDZ)
    - FY 2007 - 299 pump-outs (post NDZ)



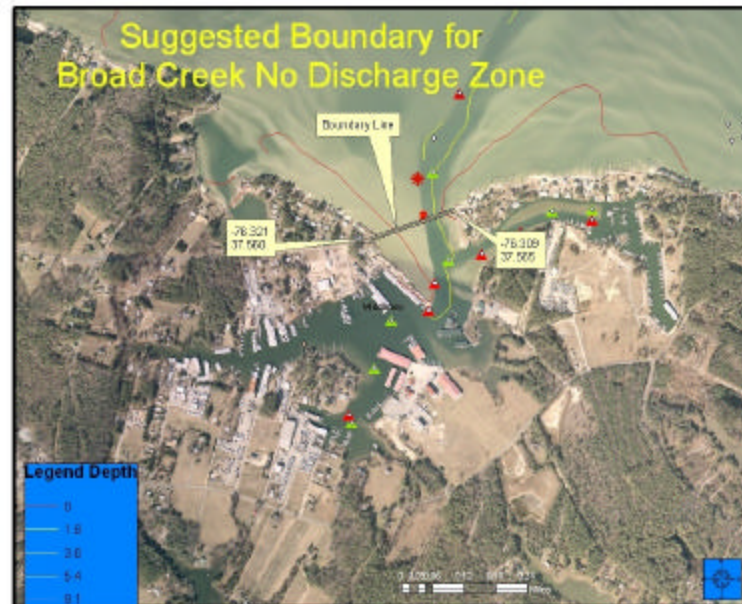
**~ 50% increase in # of pump-outs**



# *Virginia Experience – Deltaville*

## *Including Broad & Jackson Creeks and Fishing Bay*

- *Local citizen interest prompted NDZ application development*
- *Sign placement at marinas; best to solicit conspicuous land-based postings on private and/or marina property*
- *EPA approved 2009; will need time to assess effectiveness of NDZ on water quality*



# *Virginia Experience – Northern Neck*

- Focus area includes tidal tributaries in Richmond (Farnham & Lancaster Creeks), Lancaster, Northumberland, & Westmoreland Counties (Farnham Ck to Rosier Ck)
- Includes ~40 impaired Shellfish/recreation use TMDL segments
- Strong NDZ support at local, county, & regional levels
- Federal stimulus funding used towards data collection (Contractor – NN PDC)
- Anticipated completion : Winter 2010 / 2011

# *Why is a NDZ Beneficial?*

- Can improve water quality which leads to the restoration of beneficial uses
- In impaired waterbodies, a NDZ addresses boats as a source allowing stakeholders to focus on upland source reductions
- Improves attractiveness of water bodies for marina owners & local business with minimal to no regulatory burden
- Encourages overall watershed stewardship



# Public Comment Period for Farnham Creek and Lancaster Creek (Richmond Co) Draft NDZ Application

Draft Application Online:

<http://www.deq.virginia.gov/export/sites/default/tmdl/ndz/drafts/farnham.pdf>

Send Comments by November 8, 2010 to:

**Mail:**

**Margaret Smigo  
4949-A Cox Road  
Glen Allen VA, 23060**

**Email:**

**[Margaret.Smigo@deq.virginia.gov](mailto:Margaret.Smigo@deq.virginia.gov)**

**Fax:**

**(804)527-5106**



# *Questions so Far?*

VA DEQ NDZ Website: <http://www.deq.virginia.gov/tmdl/ndz.html>

To report a non-working pump-out contact Preston Smith at Virginia Department of Health (804)864-7468

**Margaret Smigo – TMDL Coordinator (804)527-5124**

**David Lazarus – Watershed Program Manager (804)527-4299**

